

**OPTICAL PACKAGES AND METHODS FOR CONTROLLING A
STANDOFF HEIGHT IN OPTICAL PACKAGES**

ABSTRACT

[0022] Optical packages and methods for controlling a standoff height in optical packages are disclosed. A disclosed package includes a chip die, a substrate, and a spacer to separate the die and the substrate at a predetermined standoff height. The size of the spacer may be chosen to maximize an optical coupling between the chip and an optical waveguide mounted to the substrate. The spacer is bonded to a conductive pad on the substrate and a conductive pad on the die to create an electrical connection between the substrate and the optical flip chip die.